

**SEVEN SPRINGS WASH
FCD GAGE ID# 4963**

STATION DESCRIPTION

LOCATION – The gage is located in northeast Maricopa County about fifteen miles north of Carefree. Latitude N 33° 57' 37.0"; Longitude W 111° 50' 36.9". Located in S09 T7N R5E in the Humboldt Mountain 7.5-minute quadrangle.

ESTABLISHMENT – Gaging was established on March 14, 2002.

DRAINAGE AREA – The drainage area is about 7.9 mi².

GAGE – The gage is a pressure transducer type instrument. The transducer diaphragm is at elevation 1.10 feet gage height, levels of June 22, 2006.

There is one crest-stage gage at this location. Pin elevation is 2.05 feet gage height, levels of June 22, 2006.

There is no staff gage at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as 3,481.32 feet NAVD 1988.

HISTORY – No previous history at this location. Station moved about 850 feet upstream October 24, 2005 following a significant flood in September 2005. The flood changed the channel at the former location significantly and was no longer suitable for gaging. Gage elevations redefined for new site. There is an approximate 11.3-foot shift upward in gage height elevations.

REFERENCE MARKS –

RM-7SPRING is an FCD brass cap located on the left bank near the old gage location. Elevation 3,479.78 feet NAVD 1988, levels of September 11, 2002. It is not tied to current gage datum, but is at approximately -1.54 feet gage height. Old gage datum was 9.90 feet gage height. The brass cap was not found during recent reconnaissance.

RP-1 is a nail located near the center of the gage cross section. Elevation 10.03 feet gage height, levels of June 22, 2006.

CHANNEL AND CONTROL – The channel is straight up and downstream from the gage cross section for several hundred feet. The control at flows less than about 1.5 feet have control based on local conditions. Above about 1.5 feet the channel is the control.

The channel bottom is a mostly a fractured friable bedrock. There is some sand and gravel present also. There is a significant left overbank which is mostly fine grained materials with some burned and some living vegetation. There is no right overbank in the gage cross section reach.

RATING – The current rating is Rating #2, applied as of gage re-installation at new location. The rating is based on survey data from three cross sections. An HEC-RAS model was developed from the survey data.

DISCHARGE MEASUREMENTS – Indirect discharge measurements could be made in a suitable cross section identified following a flow. Direct measurements could be made by wading the channel at the forest road crossing just downstream of the gage.

POINT OF ZERO FLOW – The PZF is at about 0.00 feet gage height.

FLOODS – A flood of about 12,000 cfs at 10.75 feet gage height (old datum/location) occurred on September 3, 2005.

REGULATION – None

DIVERSIONS – None known

ACCURACY – Fair

UPDATE - July 20, 2011
 D E Gardner